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TITLE: MANUFACTURE OF SEMICONDUCTOR DEVICE
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ABSTRACT:

PURPOSE: To improve the throughput of a semiconductor device and to perform an effective bonding by screen printing a thermoset conductive resin on one main surface of a semiconductor chip formed with a pad in a predetermined pattern, then pressing a flat plate on the upper surface of the resin pattern to form a bump of uniform height, and then connecting leads by heat treating on the bump to reduce the steps of manufacturing the bump.

CONSTITUTION: A mask 9 for screen printing in the same position and size as those of a pad 2 formed on one main surface of a semiconductor chip 1 is positioned on the pad 2 of the chip 1. Then, a conductive resin 10

is screen
printed, the mask 9 is then removed, the resin 10 is pressed so that
the chip 1
and a flat surface 11 become parallel to each other, and a bump 100
of uniform
height is obtained by temporarily heat treating. Then, the bump 100
and leads
4 are positioned, and all the bumps 100 and the leads 4 are
contacted. When
heat treating in this state, since the resin 10 for forming the bumps
100 is
thermoset, the bumps 100 and the leads 4 are electrically and
mechanically
connected.

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